CLAIMS

What is claimed is:

1. A method for providing protected swapping of a peripheral component in a computer system comprising:

determining a position of a first mechanical retention latch, said first mechanical retention latch having an open position and a closed position and configured to communicatively couple to a computer expansion card slot;

provided said first mechanical retention latch is in said open position, filtering power management events including preventing said computer system from powering up; and

provided said first mechanical retention latch is in said closed position, allowing said computer system to accept power management events.

2. The method as recited in Claim 1 wherein said position is determined from said first mechanical retention latch configured to communicatively couple to a peripheral component interconnect slot.

3. The method as recited in Claim 1 further comprising:

receiving data from an optical device communicatively coupled to said first mechanical retention latch for determining said position of said first mechanical retention latch.

4. The method as recited in Claim 1 further comprising:

powering down said computer system to a sleep mode before determining a position of said first mechanical retention latch.

5. The method as recited in Claim 1 further comprising:

hot swapping an expansion card from said expansion card slot and determining said position of said first mechanical retention latch.

6. The method as recited in Claim 1 further comprising:

determining a position of a second mechanical retention latch wherein provided said first or said second mechanical retention latch are in said open position, filtering said power management events.

7. The method as recited in Claim 6 wherein said power management events include powering up said computer system from a sleep mode.

8. A system for managing power in a computer system comprising:

a mechanical retention latch having an open position and a closed position configured to physically retain an expansion card in an expansion card slot;

a position sensor for determining if said mechanical retention latch is in said open position or in said closed position; and

a power management events filter for filtering data based on said position of said mechanical retention latch wherein if said mechanical

retention latch is in said open position, said power management events filter filters said data to prevent powering up said computer system.

9. The system as recited in Claim 8 wherein said position sensor comprises an optical module for determining if said mechanical retention latch is in said open position or in said closed position.

10. The system as recited in Claim 8 wherein said mechanical retention latch is coupled to a peripheral component interconnect card slot.

11. The system as recited in Claim 10 wherein said mechanical retention latch is configured to automatically closes when a peripheral component interconnect card is fully inserted in said peripheral component interconnect card slot.

12. The system as recited in Claim 8 wherein provided said mechanical retention latch is in said closed position, said power management module allows said computer system to accept power management events.

13. The system as recited in Claim 8 further comprising:

a plurality of mechanical retention latches and a plurality of corresponding position sensors configured such that provided one of said plurality of mechanical retention latches is in said open position, said power

management events filter filters said data to prevent powering up said computer system.

14. The system as recited in Claim 13 wherein said computer system is prevented from powering up from a sleep mode.

15. A computer readable medium comprising executable instructions which, when executed in a processing system, causes the system to perform a method of controlling power management events comprising:

receiving data corresponding to the position of a mechanical retention latch having an open position and a closed position; and

provided said mechanical retention latch is in said open position, filtering power management events and preventing said processing system from accepting power management events.

16. The computer readable medium as described in Claim 15 wherein said position is determined from said mechanical retention latch configured to communicatively couple to a peripheral component interconnect slot.

17. The computer readable medium as described in Claim 15 wherein said data corresponding to said position of said mechanical retention latch is received from an optical device configured to determine said position of said mechanical retention latch.

18. The computer readable medium as described in Claim 15 wherein said method is executed while said processing system is in a sleep mode.

19. The computer readable medium as described in Claim 15 wherein said method is executed while hot swapping a component of said processing system.

20. The computer readable medium as described in Claim 15 wherein said method further comprises:

receiving data corresponding to a plurality of mechanical retention latches provided one of said plurality of mechanical retention latches is in said open position, filtering power management events and preventing said processing system from powering up.

21. The computer readable medium as described in Claim 20 wherein said power management events include powering up said computer system from a sleep mode.